

WHAT IS CLAIMED IS :

1. An integrated circuit of a front-end type for receiving a high frequency signal, comprising:

an RF circuit including a variable gain amplifier;

a digital demodulating circuit including an amplification rate control circuit;

switching means for switching between (a) inputting an internal signal, as an amplification rate control signal, into the variable gain amplifier via an automatic gain control loop, the internal signal being outputted from the digital demodulating circuit and (b) directly inputting a fixed value signal, as an amplification rate control signal, into the variable gain amplifier by opening the automatic gain control loop,

the RF circuit and the digital demodulating circuit being integrated in one package, and

the switching means being switched over in accordance with a switching control signal.

2. The integrated circuit as set forth in Claim 1, wherein:

the switching control signal is supplied from outside.

3. The integrated circuit as set forth in Claim 1,

further comprising:

switching control signal generating means for outputting the switching control signal.

4. The integrated circuit as set forth in Claim 1, wherein:

the fixed value signal is a test-use control voltage supplied from outside.

5. The integrated circuit as set forth in Claim 1, further comprising:

test-use fixed value signal generating means for outputting the fixed value signal.

6. The integrated circuit as set forth in Claim 1, wherein:

the digital demodulating circuit includes, in the automatic gain control loop, an amplification rate control circuit having an amplification rate control signal generating apparatus for generating an amplification rate control signal that is to be supplied to the variable gain amplifier in the RF circuit, and

the switching means located preceding to the amplification rate control signal generating apparatus.

7. The integrated circuit as set forth in Claim 6, wherein:

the amplification rate control circuit has test-use amplification rate control signal generating means for outputting a test-use amplification rate control signal to the amplification rate control signal generating apparatus via the switching means, the test-use amplification rate control signal corresponding to the fixed value signal.

8. The integrated circuit as set forth in Claim 1, further comprising:

a switching circuit for switching between, in accordance with an output draw-out switching control signal, (a) inputting a base band analog output to the digital demodulating circuit, and (b) outputting the base band analog output to outside via an inspection-use output terminal, the base band analog output being outputted from the RF circuit.

9. The integrated circuit as set forth in Claim 8, comprising:

a driving circuit between the switching circuit and the inspection-use output terminal.